

## *Bt Toxin and Imidacloprid from 'Lethal Trees'*

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**Forestry Tasmania has denied the use of GM trees that might be responsible for toxic scum and water found in North East Tasmania.** In August 2009, Forestry published an article on it's website called '**Some Trees Can be Lethal!**' (1) and how right they were.

The article discusses a method of producing more pest-resistant trees by injecting them with an insecticide. One percent of trees in a plantation would be injected to entice insects away from other trees. The doctor responsible for the programme, Dr **Jane Elek**, has published a number of papers investigating the use of a biotoxin to control specific pests on *Eucalyptus*, including *Eucalyptus nitens* plantations (2,3).

This particular biotoxin, *Bacillus thuringiensis*, or Bt, is a genetically modified endotoxin and is commonly added to GM crops around the world.

In the document titled, '*Implementation of Tasmania Regional Forest Agreement 2002 -2007*', **4 Novodor**, one of Bt's trade names is mentioned as being useful for controlling **autumn gum moth**. This article suggests Bt is already being used in Tasmania. *Bacillus thuringiensis* can colonise crops and pass into the soil and waterways through root exudates. (5,6).

*Bacillus thuringiensis* can alter ecosystems in a number of ways by poisoning freshwater mussels (7), altering soil microbes (8,9), affecting non-target insects (10), including butterflies (11) and altering plant herbivore interactions (12). It can also be passed directly on to future generations (10). Trees genetically modified with Bt, breakdown less easily than non-Bt plants (13).

Insects can become resistant to Bt toxin (14), as they can with any pesticide, so it is yet another unsustainable move by industry that will ultimately create more problems than it solves.

Forestry's interest in this toxin suggests that it intends to use it, if it has not done so already. By using, or intending to use a genetically modified organism to control crops, it could be breaching Tasmania's strict *Genetic Modified Organisms* laws.

To be sure, the matter requires further investigation. Bt is a possible suspect in the search for toxins responsible for toxic scum and water in the North East of the state.

Another article called '*Testing the efficacy of Lethal Trap Trees*' (15), published online by the **Cooperative Research Centre for Forestry**, in March 2009, mentions injecting trees with **imidacloprid** pesticide. This pesticide is a neurotoxin and was banned in France in 1999 for almost wiping out bee populations (17). It contaminates waterways (18), is very toxic to certain species of birds (19) and can cause eggshell thinning (21) in the same way DDT did.

It could be another source of toxins in the North East of the state.

Forestry's article, '*Some Trees can be Lethal!*' claims that injecting trees with insecticide is its chosen method of pest control, because it is cost effective, more socially acceptable and environmentally responsible.

#### What methods were used to establish these claims?

Have the public been widely consulted to establish if they find it an acceptable choice of pest management? How many people in the general public are aware of this activity, or are in a position to judge the future health and environmental impacts of this experimental technology?

#### What happened to participatory planning models and environmental justice?

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